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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,849	07/09/2001	Morris C. Buenemann JR.	101960-200	1534

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WIGGIN & DANA LLP
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EXAMINER	
WYSZOMIERSKI, GEORGE P	
ART UNIT	PAPER NUMBER
1742	

DATE MAILED: 12/13/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/901,849	Applicant(s) ROBINSON ET AL.	
	Examiner George P Wyszomierski	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) *20-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 29-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,5* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Applicant's election with traverse of Group I, claims 1-19 and 29-35 in Paper No. 7 is acknowledged. The traversal is on the ground(s) that no serious burden would exist in examining all the claims in this application. This is not found persuasive because in fact the non-elected Group of claims is classified in an area completely different from that of the elected Group. Also the two groups of claims are drawn to completely different arts, i.e. the elected Group is drawn essentially to a metallurgical process while the non-elected Group is drawn to an ammunition making process, and very few persons would profess to be experts in both of these arts.

The requirement is still deemed proper and is therefore made FINAL.

2. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 1 of this claim, the term "the core region" lacks proper antecedent basis.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

4. Claims 1-14, 17-19, 29-31, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann (U.S. Patent 3,597,188).

Neumann discloses a process of obtaining substantially spherical shot by water atomizing a molten iron material followed by a heat treatment to decarburize the shot. Column 3 of Neumann further discloses separating the various shot particles by size and subjecting only a desired size range of the particles to further processing. Neumann does not specify the particular size ranges as recited in several of the instant claims, and does not specify that a particular hardness though only a certain percentage of the thickness of the particles is obtained by the decarburizing step. These differences are not seen as resulting in a patentable distinction between the prior art process and that presently claimed because:

a) With regard to particle sizes, the various sizes as recited in column 3 of Neumann overlap those recited in the instant claims, and thus the Neumann process appears amenable to the production of shot of the presently claimed size(s).

b) Given that the actual process steps of Neumann involve subjecting substantially the same material to substantially the same set of manipulative steps as is done in the present invention, it stands to reason that the same hardness values, in all or part of the final product materials, would likewise be achieved in both instances.

Consequently, a prima facie case of obviousness is established between the Neumann disclosure and the presently claimed invention.

5. Claims 15, 16, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann, as above, in view of Arvidsson (U.S. Patent 6,027,544).

The Neumann patent does not discuss manufacturing compositions as set forth in the instant claims. Arvidsson indicates that it is conventional in the art to manufacture compositions as presently claimed by a method which includes water atomization followed by a heat treatment to decarburize the material, i.e. by a method substantially in accord with that done by

Neumann. In particular, note column 2, lines 54-56 and column 3, lines 61-65 of Arvidsson. This disclosure of Arvidsson would have motivated one of ordinary skill in the art to form shot of the presently claimed composition using the method as disclosed by Neumann.

6. The remainder of the art cited on the enclosed PTO-892 and 1449 forms is of interest. This art is held to be no more relevant to the claimed invention than the art as applied in the rejections, supra.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. The fax phone number for this Group is (703) 872-9310 for all correspondence except for After Final amendments in which case the Fax number is (703) 872-9311. The Right fax number for this examiner is (703) 872-9039. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

GPW
December 11, 2002